Patent claims

1. A network having communication components (A1 - A4, B1 - B11) which have associated addresses and which communicate with one another using these addresses,
where a plurality of the communication components (A1 - A4, B1 - B11) have resources,
characterized
in that a plurality of the communication components (A1 - A4, B1 - B11) have search functions integrated in them for the purpose of ascertaining the addresses of further communication components (A1 - A4, B1 - B11) which have resources,
in that each of these search functions is designed to ascertain the addresses by sending a first search message which prompts each communication component reached to return a hit response containing its address,
in that the search function then sends at least one second search message, comprising information about the sought resources, to at least one of the ascertained communication components (A1 - A4, B1 - B11), and at least one of the communication components (A1 - A4, B1 - B11) which is able to provide one of the sought resources responds to the second search message, and
in that the resources comprise communication services which can be used in the network, with
the response to the second search message containing respective specific information about the communication service, and
in that the communication components (A1 - A4, B1 - B11) which respond to the second search message also forward the second search message to other communication components (A1 - A4, B1 - B11).

2. The network as claimed in claim 1, characterized in that the communication components (A1 - A4, B1 - B11) are set up to store details about the resources of further communication components (A1 - A4, B1 - B11) which (resources) can be used in the network.

3. The network as claimed in claim 1 or 2, characterized in that the second search message is designed to ascertain the information stored in a communication component (A1 - A4, B1 - B11) about the usable resources of further communication components (A1 - A4, B1 - B11), with the response to this search message comprising the addresses and the use-related details.

4. The network as claimed in one of the preceding claims 1 to 3, characterized in that the communication components (A1 - A4, B1 - B11) can be used to disable or enable access to individual or all inherent resources by other communication components (A1 - A4, B1 - B11).

5. The network as claimed in one of the preceding claims 1 to 4, characterized in that the communication components (A1 - A4, B1 - B11) can send and/or respond to both first and second search messages.

6. The network as claimed in one of the preceding claims 1 to 5,
characterized
in that the search function of a communication component (A1 - A4, B1 - B11) is set up such that it sends at least one first search message and continues to send second search messages until a sought resource has been found in the network and the information transmitted in the response to one of the second search messages allows the use of the resource.

7. The network as claimed in one of the preceding claims 1 to 6,
characterized
in that the addresses of communication components (A1 - A4, B1 - B11) which (addresses) have been obtained from the hit response and from the response to second search messages can be used to set up communication links.

8. The network as claimed in one of the preceding claims 1 to 7,
characterized
in that the response comprises the type and number of available services and also the type of the inherent network access, including bandwidth and availability, and the location information.

9. A method for autonomously administrating a network having communication components (A1 - A4, B1 - B11) which have associated addresses and which communicate with one another using these addresses,
where a plurality of the communication components (A1 - A4, B1 - B11) have resources,
characterized
in that search functions integrated in a plurality of the communication components (A1 - A4, B1 - B11) are used for the purpose of ascertaining the addresses of further communication components (A1 - A4, B1 - B11) which have resources,
where each of these search functions ascertains the addresses by sending a first search message which prompts each communication component (A1 - A4, B1 - B11) reached to return a hit response containing its address,
in that the search function then sends at least one second search message, comprising information about the sought resources, to at least one of the ascertained communication components (A1 - A4, B1 - B11), and
where at least one of the communication components (A1 - A4, B1 - B11) which is able to provide one of the sought resources responds to the second search message, and
in that the resources comprise communication services which can be used in the network, with
the response to the second search message containing respective specific information about the communication service, and
in that the communication components (A1 - A4, B1 - B11) which respond to the second search message also forward the second search message to other communication components (A1 - A4, B1 - B11).